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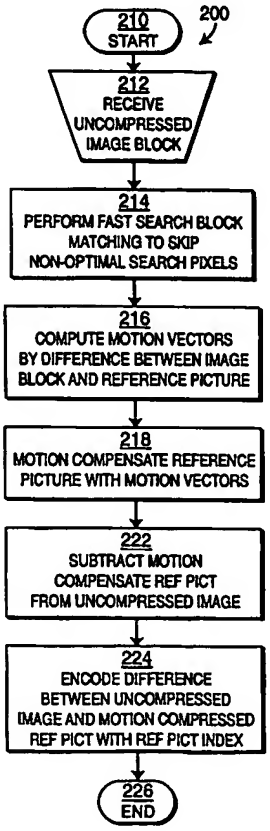
(54) Title: MOTION ESTIMATION WITH FAST SEARCH BLOCK MATCHING



(57) Abstract: A video encoder and corresponding method are provided for encoding video signal data for an image block and a particular reference picture index to predict the image block, where the encoder (100) includes a fast search block motion estimator (180) for providing motion vectors corresponding to the at least one particular reference picture, the motion estimator comprising a fast search block matching portion for performing fast search block matching while excluding non-optimal search points in accordance with a comparison of a normalization of the image block pixels against a normalization of the reference picture pixels, the fast search block matching portion having an output responsive to the at least one particular reference picture; and the corresponding method (200) includes receiving a substantially uncompressed image block (212), block matching (214) the image block in correspondence with at least one particular reference picture while excluding non-optimal search points in accordance with a comparison of a normalization of the image block pixels against a normalization of the reference picture pixels, computing (216) motion vectors corresponding to a difference between the image block and the at least one particular reference picture, and motion compensating (218) the at least one particular reference picture in correspondence with the motion vectors.

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